

REMARKS

In response to the Office Action dated October 3, 2003, Applicants respectfully request reconsideration and withdrawal of the rejections of the claims.

Claim 25 was rejected under 35 U.S.C. § 102, on the grounds that it was considered to be anticipated by the Braun patent, and claims 1, 2, 13, 14, 21-24 and 26 were rejected under 35 U.S.C. § 103, as being unpatentable over the Braun patent in view of the Medina Puerta patent. Claim 28 was rejected under 35 U.S.C. § 102 on the basis of the newly cited Tsunashima patent, and claims 9 and 10 were rejected under 35 U.S.C. § 103 on the basis of the Tsunashima patent in view of the Medina Puerta patent.

Turning first to the rejections of claims 9, 10 and 28, it is respectfully submitted that the Tsunashima patent does not qualify as prior art against the pending claims. The Tsunashima patent issued on January 2, 2001, from an application having a filing date of May 4, 1999. The present application claims priority from Japanese Patent Application No. 10-333940, filed November 25, 1998. In support of this claim for priority, a verified translation of the Japanese application is being submitted herewith. It is respectfully submitted that the Japanese application supports the subject matter of claims 9, 10 and 28. For example, see the translation at paragraphs 0024-0026 (pages 11-13). Accordingly, these claims have an effective filing date of November 25, 1998, which is prior to the §102(e) prior art date of the Tsunashima patent. Since this patent does not qualify as prior art against claims 9, 10 and 28, reconsideration and withdrawal of the rejections of those claims is requested.

Turning now to the rejection of claim 25, this claim recites an optical system for use in an optical pickup comprising a lens element having a first concave surface on the long conjugate distance side thereof, and a second convex surface on the opposite side thereof. The Braun patent is directed to a range and boresight tester for optical laser range finders. The tester of this patent employs a thick lens having a spherical surface 22. The first surface 18 is illustrated as being planar, but the patent discloses that, in some arrangements, it may be curved. The patent does not indicate, however, whether the curvature is concave or convex.

Claim 25 recites that the first surface has a first reflective coating on a central portion thereof, and the second surface has a second reflective coating on a peripheral portion thereof. The claim further recites that incident luminous flux passing through the light emitting area of the first concave surface is *totally reflected* on the second reflective coating, and is again *totally reflected* on the first reflective coating.

The Braun patent does not disclose that the surface 22 of the thick lens has a reflective coating that totally reflects incident luminous flux passing through the first surface 18. Nor does it disclose that the first surface 18 has a reflective coating that totally reflects luminous flux reflected at the second surface 22. Rather, the Braun patent describes the operation that takes place within the lens 20 as follows:

The pulse of the waveform 14 proceeds through the optical structure 20 to the second side surface 22 having a spherical shape. The illustrated path in Fig. 1 as well as in the other figures is that of a typical light ray. At the second side surface 22, *some of the light is transmitted out of the optical means*, but due to reflection a substantial portion of the light is reflected back towards the first surface 18. When the light

again reaches the first surface 18 *some of it is transmitted out of the optical means*; but again a portion is reflected to the surface 22. This process may be repeated any desired number of times depending on the design configuration of the optical structure 20. Simultaneously the light is gradually being focused to a focal point, such as 24 due to the curved reflective surface 22.

(Column 2, lines 42-57, emphasis added)

From the foregoing, it can be seen that the Braun patent teaches away from total reflection at each of the surfaces 18 and 22. Accordingly, it cannot anticipate claim 25, since it does not disclose coatings on these surfaces that totally reflect luminous flux passing through the light emitting area of the surface 18, nor luminous flux which is reflected from the surface 22. Reconsideration and withdrawal of the rejection of claim 25 is therefore respectfully requested.

The rejections of claims 1, 2, 13, 14, 21-24 and 26 acknowledge that the Braun patent does not disclose that the second surface 22 has an aspherical shape. To this end, the rejection relies upon the teaching in the Medina Puerta patent of a lens having aspherical surfaces, and alleges that it would be obvious to utilize an aspherical surface on the second surface 22 of the thick lens 20 of the Braun patent.

As noted in Applicants' previous responses, the Braun patent *only* discloses that the surface 22 has a spherical shape, and in fact *requires* that the surface have such a shape (column 6, lines 36-39). As such, the Braun patent teaches *away* from using any shape other than a spherical shape, and for at least this reason a person of ordinary skill in the art would not find it obvious to utilize an aspherically shaped surface for the thick lens 20 of the laser range finder tester.

Furthermore, it is respectfully submitted that there is no motivation to apply any teachings from the Medina Puerta patent in the tester of the Braun patent. The function of the laser range finder tester is to determine the sensitivity, boresight and range accuracy for the laser range finder. The purpose of the lens 20 of the Braun patent is to gradually focus incoming light to a beam of minimum diameter (column 2, lines 55-58). In contrast, the Medina Puerta patent is directed to an optical device that is designed to magnify images. Neither reference contains any teaching which suggests that effects to be corrected in a magnification of images are applicable to a laser range finder tester. The laser range finder tester of the Braun patent does not employ images. Since it is not concerned with the quality of images, there is no need to correct for aberrations.

Accordingly, the Office Action has not identified any motivation for applying the teachings of the Medina Puerta patent to the laser range finder tester of the Braun patent. These two patents are directed to entirely different technical fields that do not have any relationship to one another.

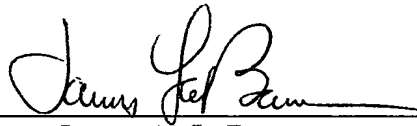
Accordingly, it is respectfully submitted that it would not be obvious to combine the teachings of the Braun and Medina Puerta patents, as suggested in the Office Action. Reconsideration and withdrawal of the rejections of claims 1, 2, 13, 14, 21-24 and 26 is respectfully requested.

For the foregoing reasons, it is respectfully submitted that all pending claims are allowable over the prior art of record. Reconsideration and withdrawal of the rejections are respectfully requested.

Respectfully submitted,

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